

REMARKS

Claims 1-18 are pending. Claims 19 to 40 have been withdrawn from consideration. Reconsideration of the application is requested.

§ 102 Rejections

Claims 1-18 were rejected under 35 USC § 102(e) as being anticipated by Sherman et al (US2002/0020688).

A primary area of disagreement appears to be whether Sherman et al. discloses a solid flat tip as required by independent claim 1. The Office Action cites paragraph 0088 in this regard, but that paragraph seems to state essentially the opposite (emphasis added):

[0088] Fig. 15A represents an alternative embodiment in which a microneedle array 290 comprises “solid” microneedles 292 and 294, rather than hollow microneedles as seen at 282 and 284 on FIG. 15. These solid microneedles 292 and 294 are formed by a similar mold as viewed on FIG. 12, but with the micropillars 222 and 224 removed from this mold, and a change in shape of the microholes 213 and 217. This simple change allows the solid microneedles to be formed within conical microholes (not shown on FIG. 12), and produces a pointed conical shape, as exhibited by the outer conical wall 250 and 252 for microneedle 292, with a top pointed surface at 296. Similarly, the microneedle 294 has a conical outer wall 254 and 256, with a similar top pointed surface at 298. The other dimensions and features of the solid microneedle array 290 can be exactly the same as those features of the hollow microneedle array 280 of FIG. 15, or the dimensions may be different since this is for a different application.

It is clear from this paragraph, as well as Figs. 15A, 24, 26, and 29, that Sherman et al. teaches only the conventional design of solid microneedles that are pointed at the tip, presumably based on the assumption in the art that this is preferable. However, as noted in the first paragraph on page 8 of the present specification, providing the microneedles with a blunt tip rather than pointed can improve structural integrity and avoid leaving fractured needle debris in the skin. This was not recognized or disclosed by Sherman et al.

Accordingly, it is believed that the rejection of claims 1-18 under 35 USC § 102(e) as being anticipated by Sherman et al (US2002/0020688) has been overcome and should be withdrawn.

In view of the above, it is submitted that the application is in condition for allowance and favorable action is requested.

Respectfully submitted,

May 8, 2007

Date

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